

ABSTRACT OF THE DISCLOSURE

A NETWORK ELEMENT TERMINAL DATA INTERFACE (NETDI) system and method incorporating a terminal user interface which permits manipulation of network elements using a hardware-specific control language is disclosed. The present invention teaches automatic generation of on-line help directly from I/O manual specifications and translation of operator commands into network element specific protocols via the use of a network element database and associated XML repository. Various preferred embodiments of the present invention incorporate the use of TL1 composer/parsers to permit the automatic generation of Translation Language 1 interfaces between an operator console and a wide variety of telecommunication network elements. The present invention operates over a wide variety of communication media and permits a significant reduction of software maintenance with respect to on-line help generation directly from I/O manual specifications as well as automated incorporation of new network element features into existing operator console environmental controls, resulting in a drastic reduction in the required network element control language proficiency of network operators in any given telecommunications environment.